

Kalamazoo College  
Kalamazoo, Michigan  
Kurt Kaufman

Quarter system. Four quarters per year; three courses (5 hrs) per quarter; 3<sup>6</sup> units for graduation.

<u>Year</u>	<u>Fall</u>	<u>Winter</u>	<u>Spring</u>	<u>Summer</u>
1	Combined Chemistry-Physics, 3 quarters			(service/vacation)
2	Inorg. reactions & Chem. Equil., Quan. Lab.	Organic I	(service/vacation)	Organic II
3	(Study abroad	Study abroad/ service/ vacation	Phys. Chem. I Phys. Chem. II	Adv. Anal. *Quan. Org.
4	Senior res. *Adv. Inorg *Biochem.	**Senior res.	*Adv. Phys. Chem.	

\*Options' courses

\*\*May be full-time for one quarter or off-campus work

General Education requirements: English/literature 3 units  
Social science 4 units  
Philosophy/religion 2 units  
German 3 units (before overseas)  
Non-science majors : Lab. science 2 units Math 1 unit  
Chemistry majors : 12 units maximum in major

Faculty: 1 full-time staff members.

12 month contract: teach three quarters. 2 courses per quarter (maximum).

Department has not requested A.C.S. approval.

Comments: Students in Teacher Education take practice teaching and do not write a senior thesis.  
Advanced placement is accepted for credit.  
The study abroad does not include any work in chemistry, but other requirements are fulfilled.

## Kalamazoo College, cont'd

In Dr. Kaufman's general discussion on' response to questions, the following remarks indicated the ~~greatest~~ beneficial aspects of the program:

The students develop increasing independence.  
Foreign study is good; the language proficiency and experience in living abroad are worthwhile, even though no chemistry is included in that part of the program.

The library use has increased greatly.

Mathematics and physics seem easier to schedule into the chemistry major curriculum.

The program provides preparation satisfactory to graduate schools.

Some aspects of the Kalamazoo plan present problems:

The chemistry department opposes the senior quarter devoted to off-campus independent study. It breaks the continuity and destroys the effectiveness of the senior research program; the chemistry department does manage to use this term for full-time research, however.

Scheduling of departmental courses is difficult: some have to be rescheduled.

The administrative staff required is somewhat larger than before. The chemistry staff is restricted in participation in summer programs off the campus.

There is perhaps some loss of interest among the seniors because of the extended off-campus period between the sophomore and senior years.

Faculty members do go abroad with the students. Part of the program is financed by the individuals involved, both students and faculty. The faculty members abroad do not do any teaching for Kalamazoo students; neither do they have to act as supervisors.

German professors are reluctant to give the frequent tests and do the course grading that is customary in American colleges.

Undergraduate laboratory assistants are not available when most needed. The faculty must be willing to be flexible in its program.

NORTHERN ILLINOIS  
J. Finholt

3-3 system. Three quarters per year, 3 courses per quarter.  
Fractional courses allowed at 1/3 unit credit. 35 units required for graduation.

<u>Year</u>	<u>Fall</u>	<u>Winter</u>	<u>Spring</u>
1	(Math)	Combined Chemistry-Physics, 2 terms (Math)	(Math)
2	Equilibrium *Math *Physics	Analytical	Thermodynamics (no lab)
3	Organic I Thermo lab (1/3) *Mechanics	Organic II *Elec. and Mag.	*Organic III ***
4	Kinetics Adv. Inorganic	*Chemical Physics *Reading term	Seminar *Research

\*Optional courses  
\*\*\* Summer research

General Education requirements: Rhetoric 1 unit  
German 4 units  
Science 3 units  
Social science 3 units  
Religion/Hist/Philosophy 2 units  
Literature/art/music 2 units

Faculty: About one course/term/faculty member

Comments: Chemistry has 10-15 majors per year.  
The Seminar is not technical  
Seniors actually do research throughout the year.  
Three 70-minute lectures per week, one lab period  
Terms have 10 weeks for courses, one week for exams.  
Lecture sections in the Chemistry-Physics course are large, with 25 students in lab sections. 40 min. of the lab section is used for recitation.

Essentially there is no summer session. The summer is used for special programs.

Favorable aspects: Twelve terms instead of eight.  
Mathematics is begun early, giving an extra year for physics.  
The faculty would like to move Organic III to the senior year.  
Exemptions allowed in math, English and German are numerous.

Unfavorable: The faculty does not unanimously approve the program.  
Language and English provide scheduling difficulties for some students.

The laboratory time permitted is not sufficient.  
It is impossible to switch to chemistry major after first year.

St. Olaf College  
Northfield, Minn.  
Allen Hanson

4-1-4 system; basically two semesters with one month interval of one course. Semester is 14 weeks plus exams. 36 units maximum, 35 required for graduation. This program is not in operation yet.

<u>Year</u>	<u>First Semester</u>	<u>Interim</u>	<u>Second Semester</u>
1	General Chemistry (Humanities) (Math) (Religion/English) (German)		(Physics I) (Math) (Religion/English) (German)
2	Organic I (Physics II) (German)	(Social Studies)	Organic II Phys. Chem. I (thermo, kinetics)
3	Phys. Chem. II Adv. Inorg.	Qual. Org.	Analytical
4	Phys. Chem. III Radiochem.	Indep. Study	Phys. Chem. IV (structure)

General Education requirements: see schedule above  
Science - 2 units

Comments: Three 60-minute lectures per week; one lab  
Summer is devoted to independent study, but the  
program is not large now  
There will have to be some fractional courses, i.e.,  
music, speech.  
One semester of General Chemistry is double-tracked  
for students who are not well-prepared.  
General Chemistry can be tested out completely.

Discussion centered around the one-month interim term, with  
the following suggestions and comments:

Should provide a desirable change of pace, but will not help  
chemistry particularly.  
Provides good opportunity for off-campus activities.  
As independent study, term is too short for chemistry.  
Should be utilized for credit course: qualitative organic;  
technique course (Quantitative Analysis); "Structure" course  
for non-majors.

Additional comments and discussion followed. Remarks generally fell into three categories:

Correlation with summer school, specifically in regard to the St. Olaf plan. Wheaton presented a contemplated revision which would consist of two 16-week semesters plus one 8-week term plus two 4-week terms. The present summer schedule is a 4 plus 4 week combination during which the entire year courses in both General and Organic are completed. The calendar difficulties involved in the St. Olaf one-month Interim term were compared with the "lame duck" session of usual Fall semester (after Christmas). This was considered no worse than the summer break where the student intends to study but doesn't. Kalamazoo reported the same trouble with its quarter of independent study.

The general result of the "new" calendars is a loss of lab time. This was deplored by DePauw, which wants the lab time for good students. At DePauw the one-semester General Chemistry course for special students has a double lab. Kalamazoo thinks the loss of lab time is probably good because it forces a cut in waste time.

Amount of time devoted to General Chemistry came in for some discussion. Practice and opinions varied from testing out completely to requiring two terms of all.

The question was asked whether the 3-3 plan actually gave the better teaching efficiency claimed. The discussion opinion seemed to be that in general it did not.